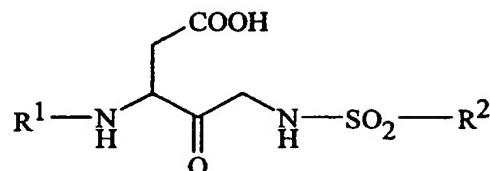
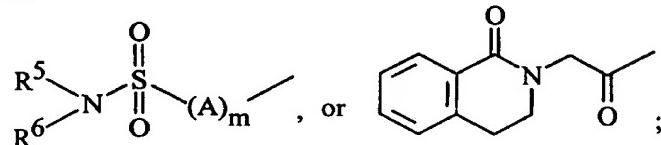
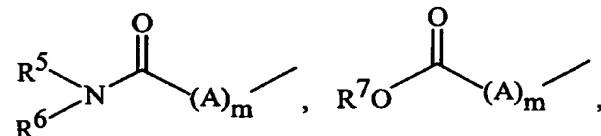
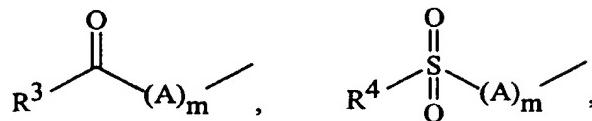


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CLAIMS

1. A compound of Formula I

wherein R¹ isR³ is hydrogen,C₁-C₆ alkyl,-(CH₂)_n aryl, or-(CH₂)_n heteroaryl;10 R⁴ is C₁-C₆ alkyl,-(CH₂)_n aryl, or-(CH₂)_n heteroaryl;R⁵ and R⁶ are each independently hydrogen,C₁-C₆ alkyl,15 -(CH₂)_n aryl, or

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$-(CH_2)_n$ heteroaryl;

R^7 is C_1 - C_6 alkyl,

$-(CH_2)_n$ aryl, or

$-(CH_2)_n$ heteroaryl;

5 each n is independently 0 to 6;

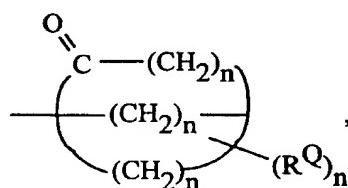
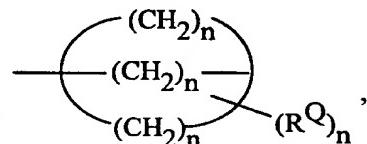
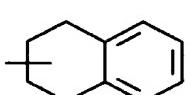
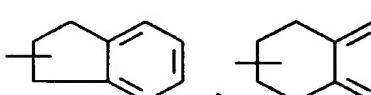
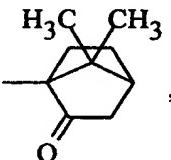
each m is independently 0, 1, 2, or 3;

A is alanine, leucine, isoleucine, proline, phenylalanine, glycine, tyrosine, serine, threonine, tryptophan, cysteine, methionine, valine, asparagine, glutamine, aspartic acid, lysine, glutamic acid, arginine, or histidine;

10 each R^Q is independently hydrogen or C_1 - C_6 alkyl;

R^2 is $-(CH_2)_n-Z$; and

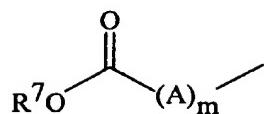
Z is aryl, heteroaryl, cycloalkyl, C_1 - C_6 alkyl,



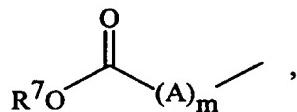
15 fluorenyl, substituted fluorenyl, substituted aryl, substituted heteroaryl, or substituted cycloalkyl, and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof.

2. A compound according to Claim 1 wherein R^1 is

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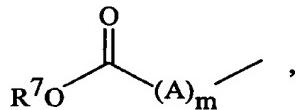


3. A compound according to Claim 1 wherein R¹ is



m is 0, and R^7 is $-(CH_2)_n$ aryl.

- 5 4. A compound according to Claim 1 wherein R¹ is



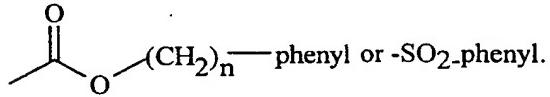
m is 0, and R^7 is $-CH_2$ aryl.

5. A compound according to Claim 1 wherein R² is -(CH₂)_n aryl.

6. A compound according to Claim 5 wherein aryl is phenyl or naphthyl.

- 10 7. A compound according to Claim 1 wherein R² is -(CH₂)_n-cycloalkyl.

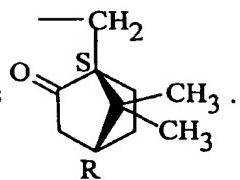
8. A compound according to Claim 1 wherein R¹



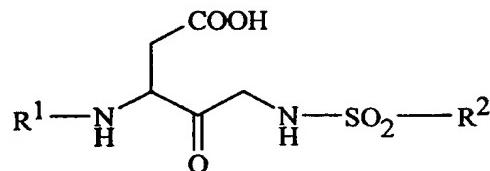
9. A compound according to Claim 1 wherein R² is

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10. A compound according to Claim 1 wherein R² is

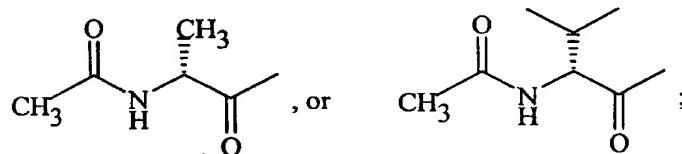
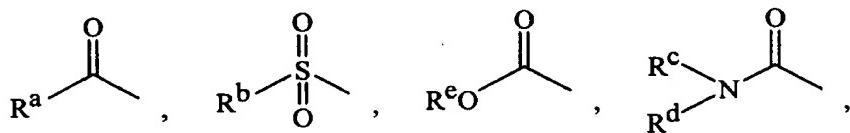


11. A compound of the Formula I



wherein R² is -CH₂CH₂- aryl, -CH₂- cycloalkyl, -CH₂CH₂- cycloalkyl, or
5 -CH₂CH₂- heteroaryl;

R¹ is



R^a is -(CH₂)_n- aryl or -(CH₂)_n heteroaryl;

R^b is aryl or heteroaryl;

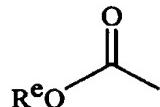
10 R^c is -CH₂ aryl or aryl;

R^d is hydrogen or C₁-C₆ alkyl;

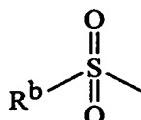
R^e is -CH₂ aryl or -CH₂ heteroaryl; and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof.

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12. A compound according to Claim 11 wherein R¹ is



13. A compound according to Claim 11 wherein R¹ is



- 5 14. A compound according to Claim 11 wherein R^e is -(CH₂)_n aryl.
15. A compound according to Claim 14 wherein aryl is phenyl or naphthyl.
16. A compound according to Claim 13 wherein R^b is aryl.
17. A compound according to Claim 16 wherein aryl is phenyl.
18. The compounds:
- 10 3-Benzylcarbonylamino-4-oxo-5-(2-phenylethanethionylamino)-pentanoic acid;
- 3-Benzylcarbonylamino-4-oxo-5-(3-phenyl-propane-1-sulfonylamino)-pentanoic acid;
- 15 3-Benzylcarbonylamino-4-oxo-5-phenylmethanesulfonyl-amino-pentanoic acid;
- 5-Benzenesulfonylamino-3-benzylcarbonylamino-4-oxo-pentanoic acid;
- 3-Benzylcarbonylamino-5-methanesulfonylamino-4-oxo-pentanoic acid;
- 20 3-Benzylcarbonylamino-5-(naphthalene-1-sulfonylamino)-4-oxo-pentanoic acid;

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- 3-Benzylcarbonylamino-5-(2-cyclohexyl-ethanesulfonylamino)-
4-oxo-pentanoic acid;
- 3-Benzylcarbonylamino-5-(2-naphthalen-1-yl-
ethanesulfonylamino)-4-oxo-pentanoic acid;
- 5 3-Benzylcarbonylamino-5-(7,7-dimethyl-2-oxo-
bicyclo[2.2.1]hept-1-(R)-ylmethanesulfonylamino)-4-oxo-pentanoic acid;
- 3-Benzylcarbonylamino-5-(indan-1-ylmethanesulfonylamino)-
4-oxo-pentanoic acid;
- 3-Benzylcarbonylamino-5-(9-fluoro-9H-fluoren-9-
ylmethanesulfonylamino)-4-oxo-pentanoic acid;
- 10 3-Benzylcarbonylamino-5-(7,7-dimethyl-2-oxo-
bicyclo[2.2.1]hept-1-(S)-ylmethanesulfonylamino)-4-oxo-pentanoic acid;
- 3-(2-Acetylamino-3-methyl-butyrylamino)-5-(7,7-dimethyl-2-oxo-
bicyclo[2.2.1]hept-1-(S)-ylmethanesulfonylamino)-4-oxo-pentanoic acid;
- 15 3-(2-Acetylamino-propylamino)-5-(7,7-dimethyl-2-oxo-
bicyclo[2.2.1]hept-1-(S)-ylmethanesulfonylamino)-4-oxo-pentanoic acid;
- 3-(1,2,3,4-tetrahydro-1-oxo-isoquinoline-2-yl)-acetamino-
5-benzenesulfonylamino-4-oxo-pentanoic acid;
- (S)-5-(Bicyclo[2.2.1]hept-1-ylmethanesulfonylamino)-4-oxo-3-[2-
20 (1-oxo-3,4-dihydro-1H-isoquinolin-2-yl)-acetylamino]-pentanoic acid;
- (S)-4-Oxo-3-[2-(1-oxo-3,4-dihydro-1H-isoquinolin-2-yl)-
acetylamino]-5-(2-phenyl-ethanesulfonylamino)-pentanoic acid; and
- 4-Oxo-3-[2-(1-oxo-3,4-dihydro-1H-isoquinolin-2-yl)-acetylamino]-
5-phenylmethanesulfonylamino-pentanoic acid.
- 25 19. A method of inhibiting interleukin-1 β converting enzyme, the method
comprising administering to a patient in need of inhibition of
interleukin-1 β converting enzyme a therapeutically effective amount of a
compound of Claim 1.

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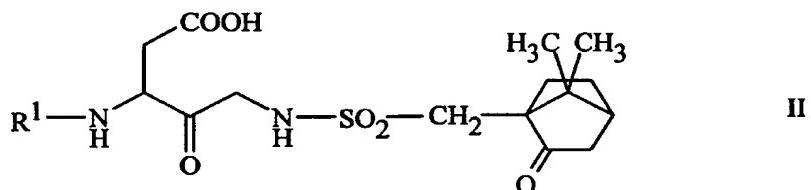
20. A method of inhibiting Caspase-4, the method comprising administering to a patient in need of Caspase-4 inhibition a Caspase-4 inhibiting amount of a compound of Claim 1.
- 5 21. A method of treating or preventing stroke, the method comprising administering to a patient having a stroke or having had a stroke a therapeutically effective amount of a compound of Claim 1.
22. A method of treating inflammatory diseases, the method comprising administering to a patient having an inflammatory disease a therapeutically effective amount of a compound of Claim 1.
- 10 23. The method of Claim 22 wherein the inflammatory disease is arthritis.
24. The method of Claim 22 wherein the inflammatory disease inflammatory bowel disease.
25. A pharmaceutically acceptable composition that contains a compound of Claim 1.
- 15 26. A method of inhibiting interleukin-1 β converting enzyme, the method comprising administering to a patient in need of inhibition of interleukin-1 β converting enzyme a therapeutically effective amount of a compound of Claim 11.
- 20 27. A method of inhibiting Caspase-4, the method comprising administering to a patient in need of Caspase-4 inhibition a Caspase-4 inhibiting amount of a compound of Claim 11.
28. A method of treating or preventing stroke, the method comprising administering to a patient having a stroke or having had a stroke a therapeutically effective amount of a compound of Claim 11.

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29. A method of treating inflammatory diseases, the method comprising administering to a patient having an inflammatory disease a therapeutically effective amount of a compound of Claim 11.
30. The method of Claim 29 wherein the inflammatory disease is arthritis.
- 5 31. The method of Claim 29 wherein the inflammatory disease is inflammatory bowel disease.
32. A pharmaceutically acceptable composition that contains a compound of Claim 11.
- 10 33. A method of treating septic shock, the method comprising administering to a patient having septic shock a therapeutically effective amount of a compound of Claim 1.
34. A method of treating septic shock, the method comprising administering to a patient having septic shock a therapeutically effective amount of a compound of Claim 11.
- 15 35. A method of treating reperfusion injury, the method of comprising administering to a patient having reperfusion injury a therapeutically effective amount of a compound of Claim 1.
36. A method of treating reperfusion injury, the method of comprising administering to a patient having reperfusion injury a therapeutically effective amount of a compound of Claim 11.
- 20 37. A method of treating Alzheimer's disease, the method comprising administering to a patient having Alzheimer's disease a therapeutically effective amount of a compound of Claim 1.

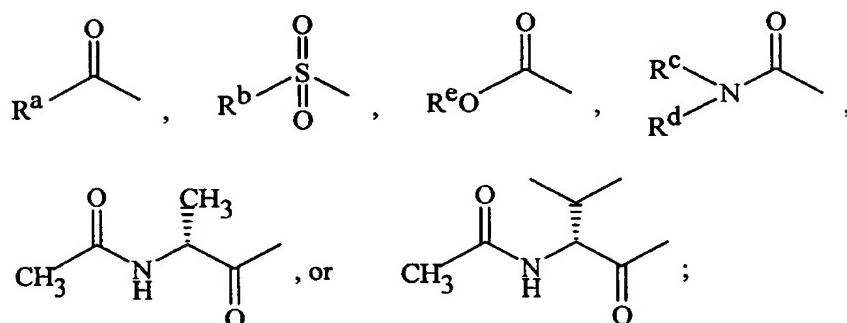
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38. A method of treating Alzheimer's disease, the method comprising administering to a patient having Alzheimer's disease a therapeutically effective amount of a compound of Claim 11.
- 5 39. A method of treating shigellosis, the method comprising administering to a patient having shigellosis a therapeutically effective amount of a compound of Claim 1..
40. A method of treating shigellosis, the method comprising administering to a patient having shigellosis a therapeutically effective amount of a compound of Claim 11.
- 10 41. A compound of the Formula II



wherein

R¹ is



15 R² is -(CH₂)n- aryl or -(CH₂)n heteroaryl;

R³ is aryl or heteroaryl;

R⁴ is -CH₂ aryl or aryl;

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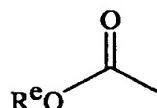
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R^d is hydrogen or C₁-C₆ alkyl;

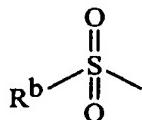
R^e is -CH₂ aryl or -CH₂ heteroaryl; and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof.

42. A compound according to Claim 41 wherein R¹ is

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43. A compound according to Claim 41 wherein R¹ is



44. A compound according to Claim 41 wherein R^e is -(CH₂)_n aryl.

45. A compound according to Claim 41 wherein aryl is phenyl or naphthyl.

- 10 46. A compound according to Claim 41 wherein R^b is aryl.

47. A compound according to Claim 46 wherein aryl is phenyl.

48. A method of inhibiting interleukin-1 β converting enzyme, the method comprising administering to a patient in need of inhibition of interleukin-1 β converting enzyme a therapeutically effective amount of a compound of Claim 41.

- 15 49. A method of inhibiting Caspase-4, the method comprising administering to a patient in need of Caspase-4 inhibition a Caspase-4 inhibiting amount of a compound of Claim 41.

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50. A method of treating or preventing stroke, the method comprising administering to a patient having a stroke or having had a stroke a therapeutically effective amount of a compound of Claim 41.
- 5 51. A method of treating inflammatory diseases, the method comprising administering to a patient having an inflammatory disease a therapeutically effective amount of a compound of Claim 41.
52. The method of Claim 51 wherein the inflammatory disease is arthritis.
53. The method of Claim 51 wherein the inflammatory disease inflammatory bowel disease.
- 10 54. A method of treating septic shock, the method comprising administering to a patient having septic shock a therapeutically effective amount of a compound of Claim 41.
55. A method of treating reperfusion injury, the method of comprising administering to a patient having reperfusion injury a therapeutically effective amount of a compound of Claim 41.
- 15 56. A method of treating Alzheimer's disease, the method comprising administering to a patient having Alzheimer's disease a therapeutically effective amount of a compound of Claim 41.
57. A method of treating shigellosis, the method comprising administering to a patient having shigellosis a therapeutically effective amount of a compound of Claim 41.
- 20 58. The compounds:
3-[2-(2-Benzylloxycarbonylamino-3-methyl-butyrylamino)-propionylamino]-4-oxo-5-(2-phenyl-ethanesulfonylamino)-pentanoic acid;

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- 3-[2-(2-Benzylloxycarbonylamino-4-carboxy-butyrylamino)-3-methyl-butyrylamino]-4-oxo-5-(2-phenyl-ethanesulfonylamino)-pentanoic acid;
- 5 3-{2-[4-Carboxy-2-(3-phenyl-propionylamino)-butyrylamino]-3-methyl-butyrylamino}-4-oxo-5-(2-phenyl-ethanesulfonylamino)-pentanoic acid;
- 10 3-[2-(2-Benzylloxycarbonylamino-3-methyl-butyrylamino)-propionylamino]-5-(7,7-dimethyl-2-oxo-bicyclo[2.2.1]hept-1-ylmethanesulfonylamino)-4-oxo-pentanoic acid;
- 15 3-{2-[4-Carboxy-2-(3-phenyl-propionylamino)-butyrylamino]-3-methyl-butyrylamino}-5-(7,7-dimethyl-2-oxo-bicyclo[2.2.1]hept-1-ylmethanesulfonylamino)-4-oxo-pentanoic acid;
- 20 3-(2-{2-[2-Acetylamino-3-(4-hydroxy-phenyl)-propionylamino]-4-carboxy-butyrylamino}-3-methyl-butyrylamino)-5-(7,7-dimethyl-2-oxo-bicyclo[2.2.1]hept-1-ylmethanesulfonylamino)-4-oxo-pentanoic acid; and
 3-(2-{2-[2-Acetylamino-3-(4-hydroxy-phenyl)-propionylamino]-4-carboxy-butyrylamino}-3-methyl-butyrylamino)-4-oxo-5-(2-phenyl-ethanesulfonylamino)-pentanoic acid.